**Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**atmosphere and Meteorology Project**

3.d.4-6

**General Directions**: Your group will be given three of the Virginia Beach Objectives related to this unit. Your group will be responsible for **researching the objectives, creating a lesson and developing an activity** to teach the three objectives you have been assigned to the rest of the class. Guiding questions have been provided to help you cover each objective. You will be using a PowerPoint slideshow to use as a visual aid to teach the lesson.

**Step 1**: Research your objective using books and resources provided (Databases located at <https://destiny.vbcps.com> and books). Take notes. Be sure to answer the guiding questions in a way that you can easily explain to your classmates. Diagrams, charts and graphs are great tools to visually interpret information. Collect citation information and save to a location you can access (jump drive, H Drive or SharePoint).

**Step 2:** Organize your information so that you can easily share it with others. Develop a PowerPoint presentation with your group to cover your topic. All group members must contribute to the PPT and participate in the presentation. Use the following format as a template for your PowerPoint.

PowerPoint format :

Slide 1-State Key Concept/Topic

Slide 2:  State objective

Slide 3-4:  Guiding Question with 3-5 bullet points

Slide 5:  State Objective

Slide 6-7:  Guiding Question with 3-5 bullet points

Slide 8:  State Objective

Slides 9-10:  Guiding Question with 3-5 bullet points

Slide 11:  Bibliography

Relevant photos/pictures throughout

**Step 3:** Develop activity to be used by classmates during lesson. All group members must contribute to the activity.

Make a 10 question multiple choice quiz that fully covers all 3 objectives.

**Step 4:** As a group, practice teaching your lesson. Remember to use the PowerPoint as a guide but do not read it to the class.

**ES3.d Daily Weather**

**3.d.4 Identify types and origins of air masses, fronts and the accompanying weather conditions.**

*What are the types of air masses that form?*

*Where do they each form?*

*How does the difference in the air masses create weather conditions?*

**3.d.5 Analyze the impact of satellite technology on weather prediction tracking severe storms (hurricanes) to evaluate the costs and benefits of this technology.**

*How is satellite technology used to help predict the weather?*

*How accurate has this technology become?*

*Is being prepared for a weather event worth the cost of the technology to predict it? Explain.*

**3.d.6 Describe the cause and effects of destructive storms (thunderstorms, hurricanes, tornadoes and winter storms) including the proper precautionary steps to be taken (in terms of lives and property saved).**

*How do thunderstorms, hurricanes, tornadoes, and winter storms form?*

*What can we do to prevent, predict, or protect ourselves from these natural disasters?*

*In addition to immediate storm damage, what are secondary ways people suffer from these storms?*

**Fast Facts:**

A tornado is a narrow, violent funnel-shaped column of spiral winds that extends downward from the cloud base to Earth.

A hurricane is a tropical cyclone (counterclockwise movement of air) characterized by sustained winds of 120 kilometers per hour (75 miles per hour) or greater.